



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,643	11/24/2003	Hiroaki Yasuda	Q78532	1194

23373 7590 11/22/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

HANNAHER, CONSTANTINE

ART UNIT	PAPER NUMBER
----------	--------------

2884

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,643

Applicant(s)

YASUDA, HIROAKI

Examiner

Constantine Hannaher

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

1. The Office has not been able to discern the city and state or foreign country of residence from the information supplied. See the requirements of 37 CFR 1.63(c)(1) as amended effective November 7, 2000.

Drawings

2. The drawings are objected to because in Fig. 3 the wavelengths are identified as “mm” where the symbol for nanometer is intended. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell *et al.* (US20030042445A1).

With respect to independent claim 1, Mitchell *et al.* discloses a radiation image readout apparatus (Fig. 6A) which comprises an optical system 40 for receiving stimulated emission 45 emitted from a radiation image converter panel 47 upon exposure to stimulating light 42, a photodetector 38 which receives the stimulated emission received by the optical system 40 for photoelectric conversion and has a sensitivity as recited, and a stimulating light cut filter 44 which is disposed in the optical path as recited, wherein the stimulating light cut filter 44 also serves as a longer wavelength light cut filter of the recited type. See paragraph [0062]. The optics 40 in the apparatus of Mitchell *et al.* collects stimulated emission 45 from screen 47 and conveys the light to the detector 38 (paragraph [0083]). Accordingly, the optics 40 either are a condenser optical system which converges the stimulated emission 45 or it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Mitchell *et al.* such that optics 40 converged light from the narrow strip of screen 47 subject to stimulation for better efficiency in collecting stimulated emission and delivering it to the line detector 38.

With respect to dependent claim 2, the longer wavelength light cut filter 44 in the apparatus of Mitchell *et al.* is disposed between the optical system 40 and the photodetector 38.

With respect to dependent claim 3, the longer wavelength light cut filter 44 in the apparatus of Mitchell *et al.* attenuates the intensity of light components in the recited range to the recited degree (paragraph [0062]).

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa *et al.* (US004896043A) in view of Arakawa (US005596202A).

With respect to independent claim 5, Arakawa *et al.* discloses a radiation image converter panel (Fig. 1) which emits stimulated emission upon exposure to stimulating light (column 4, lines 19-31) which comprises a filter 1 which transmits the stimulated emission and attenuates the intensity of the light components longer in wavelength than the stimulating light (see Fig. 2 compared with the wavelength of the stimulating light, column 4, line 65) and which is provided on the side of the radiation image converter panel from which the stimulated emission emitted from the radiation image converter panel is detected. Because the stimulating light arrives through protective film 1, there is no requirement in the panel of Arakawa *et al.* that the filter 1 transmit the stimulating light (instead, it is reflective, column 5, lines 1-2) but Arakawa shows that stimulation and emission occurs at the same side of a radiation image converter panel 4 (Fig. 2) and further that attenuating the intensity of the light components longer in wavelength than the stimulating light remains a requirement in such an arrangement (column 9, lines 17-24). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the panel of Arakawa *et al.* such that filter 1 transmits stimulating light (*i.e.*, the panel of Arakawa *et al.* is inverted such that stimulating light and stimulated emission transmit through filter 1) such that the panel may be employed in a readout apparatus as described by Arakawa.

With respect to dependent claim 6, the graph in Fig. 2 of Arakawa *et al.* is suggestive that the transmission of the filter 1 in the disclosed panel results in an attenuation of the intensity of the light components in the recited range is to the recited degree, and Arakawa shows that filters with the recited performance are known (Figs. 10 and 11, column 9, lines 19-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to specify that the performance

of filter 1 was as recited in view of the effective performance in protecting the photodetector described by Arakawa.

Double Patenting

6. Claims 1 and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 10/391,272 in view of Mitchell *et al.* (US20030042445A1). Claim 2 of the copending application (as found in US2003/0179415A1) anticipates the elements of the claimed radiation image read-out apparatus of independent claim 1 but for the inclusion of a longer wavelength light cut filter. The stimulating light cut filter 44 in the radiation image read-out apparatus of Mitchell *et al.* serves as a longer wavelength light cut filter of the recited type (paragraph [0062]). In view of the improved rejection of light to which the photodetector in the apparatus claimed by the copending application (clause iii of claim 2) is sensitive as suggested by Mitchell *et al.* (paragraph [0062]), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the claimed apparatus to comprise a longer wavelength light cut filter. Claim 2 of the copending application further anticipates the element of the correction means of dependent claim 4 (paragraph between clause iii and clause a).

This is a provisional obviousness-type double patenting rejection.

Response to Submission(s)

7. This application has been published as US2004/0099827A1 on May 27, 2004, as JP 2004-177490 A on June 24, 2004, and again as EP 1422726 A2 on June 26, 2004.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (571) 272-2437. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ch


Constantine Hannaher
Primary Examiner